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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/791,427

03/02/2004

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1456/3

3775

25297 7590 07/28/2010  
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EXAMINER

DELCOTTO, GREGORY R

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

07/28/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/791,427	<b>Applicant(s)</b> ZAKI ET AL.	
	<b>Examiner</b> Gregory R. Del Cotto	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 6/1/10.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-42 and 105-135 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 and 105-135 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/10, 7/10</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-42 and 105-135 are pending. Claims 43-104 have been canceled.

Applicant's response filed 12/28/08 has been entered.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/16/10 and 6/1/10 have been entered.

### **Objections/Rejections Withdrawn**

The following objections/rejections as set forth in the Office action mailed 4/29/09 have been withdrawn:

None.

### ***Claim Rejections - 35 SC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

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351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-42, 105-107, 110-116, and 119-135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heimann et al (US 6,281,189) in view of Carbonell et al (US 2003/0213747).

Heimann et al teach a composition containing at least one soybean oil derived compound and at least one member chosen from the group of drying agent(s), co-solvents, and additives. The composition can comprise methyl soyate, and d-limonene. See Abstract. More specifically, the composition contains from 0.5 to 20% by weight of at least one drying agent, about 1 to about 30% by weight of at least one cosolvent, additives from 0 to about 25% by weight, and 5 to 75% by weight of methyl soyate. See column 1, lines 45-69. Suitable additives include surfactants (e.g. anionic and nonionic), emulsifiers, antimicrobial compounds, etc. Suitable co-solvents include water, hydrocarbon glycols, and mixtures thereof among others. See column 2, lines 10-65. The compositions can replace toxic chlorinated solvents among other conventional and environmentally undesirable cleaners/solvents. Additionally, additives

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may be added to the compositions including dipropylene glycol n-butyl ether (butyl carbitol), etc. See column 2, lines 50-65. The inventive composition can be employed as a general purpose cleaner, parts cleaner, engine degreaser, tar and asphalt removal, printing press cleaner, metal cleaner, etc. See column 1, lines 30-45.

Heimann et al do not teach the use of a benzoic acid ester or a composition having the specific physical parameters containing a benzoic acid ester, methyl soyate, nonionic surfactant, water, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Carbonell et al teach environmentally friendly solvents used to dissolve or remove residues and/or substances from substrates wherein the residue and/or substance is contacted with a generally recognized as safe solvent (GRAS) to dissolve the residue and/or substance in the solvent followed by the extraction of the residue and/or substance from the solvent such as by contact with carbon dioxide. See Abstract. These GRAS solvents are environmentally responsible solvents and include benzoic acid ester solvents such as methyl benzoic acid ester, isopropylbenzoic acid ester, methyl salicylate, ethyl salicylate, etc. See paras. 38-45. Preferably, the ester-containing solvent contains at least about 70-99% by weight of the one or more esters. See para. 50.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a benzoic acid ester solvent in the cleaning composition taught by Heimann et al, with a reasonable expectation of success, because Carbonell et al teach the use of solvents such as benzoic acid esters in similar cleaning

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compositions and that benzoic acid esters are environmentally friendly solvents and further, Heimann et al teach the use of various cosolvents which would encompass benzoic acid ester solvents.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition containing a benzoic acid ester, methyl soyate, nonionic surfactant, water, and the other requisite components of the composition in the specific amounts as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of Heimann et al in combination with Carbonell et al suggest a composition containing a benzoic acid ester, methyl soyate, nonionic surfactant, water, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Note that, with respect to the pH, flash point, and other characteristics of the composition as recited by the instant claims (more specifically, instant claim 110), the Examiner asserts that the teachings of Heimann et al in combination with Carbonell et al would suggest compositions having the same pH, flash point, and other characteristics of the composition as recited by the instant claims because Heimann et al in combination with Carbonell et al suggest compositions containing the same components in the same proportions as recited by the instant claims.

Claims 1-19, 21-28, 33-42, 105, 110-116, 119-122, 124-126, and 129-135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krawack (US 5,143,639) in view of Carbonell et al (US 2003/0213747).

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Krawack teaches a compositions for removing inks and the like from printing machines. See column 1, lines 5-15. The compositions contain a mixture of 50 to 100% by weight of a C1-C5 alkyl ester of an aliphatic C8-C22 monocarboxylic acid or mixture of such esters, 0 to 50% of vegetable oil, 0 to 10% of a surfactant, and a corrosion inhibitor in an amount up to 2% by weight. See column 2, lines 30-60. Suitable surfactants include Dehydol LT7 (heptaethylene glycol monolauryl ether, nonionic surfactant). See column 4, lines 35-50.

Krawack does not teach the use of a benzoic acid ester or a composition having the specific physical parameters containing a benzoic acid ester, methyl soyate, nonionic surfactant, water, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Carbonell et al are relied upon as set forth above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a benzoic acid ester in the cleaning composition taught by Krawack, with a reasonable expectation of success, because Carbonell et al teach the use of solvents such as benzoic acid esters in similar cleaning compositions and that benzoic acid esters are environmentally friendly solvents. Note that, it is prima facie obvious to combine two compositions, each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). See MPEP 2144.06.



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It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition containing a benzoic acid ester, methyl soyate, nonionic surfactant, water, and the other requisite components of the composition in the specific amounts as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of Krawack in combination with Carbonell et al suggest a composition containing a benzoic acid ester, methyl soyate, nonionic surfactant, water, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Note that, with respect to the pH, flash point, and other characteristics of the composition as recited by the instant claims (more specifically claim 110), the Examiner asserts that the teachings of Krawack in combination with Carbonell et al would suggest compositions having the same pH, flash point, and other characteristics as recited by the instant claims because Krawack in combination with Carbonell et al suggest compositions containing the same components in the same proportions as recited by the instant claims.

Claims 20 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krawack (US 5,143,639) in view of Carbonell et al (US 2003/0213747) as applied to claims 1-19, 21-28, 33-42, 105, 110-116, 119-122, 124-126, and 129-135 above, and further in view of Heimann et al (US 6,281,189).

Krawack and Carbonell et al are relied upon as set forth above. However, neither reference teaches the use of an odor-masking agent such as d-limonene in

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addition to the other requisite components of the composition as recited by the instant claims.

Heimann et al are relied upon as set forth above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use d-limonene as a fragrance in the composition taught by Krawack, with a reasonable expectation of success, because Heimann et al teach use of d-limonene as an odorant in a similar cleaning composition and further, odorants such as d-limonene are notoriously well-known to those skilled in the art as suitable for use in cleaning compositions and desirable for such use.

Claims 1-4, 6, 7, 11-19, 21-26, 33-42, 108, 110, 112-116, 120, 121, 122, 124, 125, and 129-134 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaul (US 5,413,729).

Gaul teaches a composition for removing coatings such as paints from substrates which comprises at least one ester and at least one lactone. See Abstract. Suitable esters include at least one ester selected from the group comprising aliphatic esters or aromatic esters, and mixtures thereof. If desired, water, aromatic solvents, organic solvents, surfactants, thickeners, corrosion inhibitors, fragrances or other additives can be added to the composition. See column 2, lines 50-69. Note that, Gaul teaches that any aliphatic or aromatic ester can be used with the lactone and suitable aliphatic esters include linear acetic acid esters such as butyl acetate, dibasic esters, etc. Aromatic esters include benzoic acid esters, etc. See column 3, lines 23-63. A surfactant is typically added to improve the stability of the composition and especially

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preferred surfactants include Span 80, a sorbitan monooleate and Tween 80, a polyoxyethylene 20 sorbitan monooleate. Fragrances can be added to mask and/or improve the solvent odor of the composition. See column 4, lines 45-69. The amounts of the lactones and esters vary in the composition and for optimum results, the composition comprises from about 90 to about 10 percent by weight lactone and from about 10 to about 90 percent by weight ester. See column 5, lines 1-30. Note that, water, may be added in amounts of up to about 50 percent by weight based on the total weight of the composition. See claim 1.

Note that, with respect to the pH, flash point, and other characteristics of the composition as recited by the instant claims (more specifically, instant claim 110), the Examiner asserts that the broad teachings of Gaul suggest compositions having the same pH, flash point, and other characteristics of the composition as recited by the instant claims because Gaul suggests compositions containing the same components in the same proportions as recited by the instant claims.

Claims 8-10, 105, 109, 117-119, and 135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaul (US 5,413,729) as applied to claims 1-4, 6, 7, 11-19, 21-26, 33-42, 108, 110, 112-116, 120, 121, 122, 124, 125, and 129-134 above, and further in view of Heimann (US 6,281,189), Nieendick et al (US 5,421,907), or Folkard et al (US 5,194,173).

Gaul is relied upon as set forth above. However, Gaul does not teach the use of a fatty acid methyl ester such as methyl soyate or an aliphatic ester such as 2-ethyhexyl

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ester in addition to the other requisite components of the composition as recited by the instant claims.

Heimann et al are relied upon as set forth above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use methyl soyate in the composition taught by Gaul, with a reasonable expectation of success, because Heimann et al teach the use of methyl soyate (an aliphatic ester) as a solvent in a similar composition and further, Gaul teaches that any aliphatic ester may be used in the composition.

Folkard et al teach a method of removing inks and other oily contaminants from printing machines, printing plates, and offset blankets using a cleaning aid that is based on a C6 or higher alkyl ester of a fatty acid, preferably containing 8 to 22 carbon atoms. The cleaning aid does not significantly degrade images on printing plates. See Abstract. The alkyl esters used are biologically degradable, non-toxic, and have low vapour pressures and high flash points. See column 1, lines 1-65. The fatty acid may be a saturated or unsaturated aliphatic monocarboxylic acid and the Examiner asserts that this would suggest oleate esters, stearate esters, etc., as recited by instant claim 118. Further, the preferred alkyl group is 2-ethyl hexyl. See column 1, line 67 to column 2, line 10.

Nieendick et al teach 2-ethylhexyl esters of fatty acids, optionally mixed with emulsifiers, solubilizers, corrosion inhibitors, and/or water. See Abstract. Nieendick et al teach that it has surprisingly been found that a particularly advantageous cleaning effect can be obtained with fatty acid 2-ethylhexyl esters in that the esters are nontoxic

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on inhalation, are completely biodegradable and have low viscosities. See column 2, lines 1-10. Typical examples are the 2-ethylhexyl esters of stearic acid, oleic acid, palmitic acid, etc. See column 2, lines 18-35. The compositions are suitable, for example, for the washing of engines and engine parts, for cleaning metal surfaces before they are primed, painted, or coated, etc. See column 3, lines 50-62.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use an aliphatic ester such as 2-ethylhexyl oleate in the composition taught by Gaul, with a reasonable expectation of success, because Nieendick et al teach that the use of 2-ethylhexyl oleate as a solvent in a similar composition provides excellent cleaning and biodegradable properties and further, Gaul teaches that any aliphatic ester may be used in the composition.

Claims 20, 27-32, 123, and 126-128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaul as applied to claims 1-4, 6, 7, 11-19, 21-26, 33-42, 108, 110, 112-116, 120, 121, 122, 124, 125, and 129-134 above, and further in view of Myers, II.

Gaul is relied upon as set forth above. However, Gaul does not teach the specific amounts of nonionic surfactant or odor masking agents (fragrances) in addition to the other requisite components of the composition as recited by the instant claims.

Myer, II teaches paint stripping compositions that are relatively non-toxic and environmentally safe for use in removing oil base alkyd and latex paints, varnishes, etc., at ambient temperatures. See Abstract. Surfactants are used to give good wetting of the composition of the surface and are used in amounts from 0 to 5% by weight.

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Fragrances are optional additives that can be used in amounts from 0 to 5% by weight.

See column 3, line 10 to column 4, line 20.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use the specific amounts of nonionic surfactant and odor masking agents as recited by the instant claims in the composition taught by Gaul, with a reasonable expectation of success, because Myer II teaches the use of surfactants and fragrances in the specific amounts as recited by the instant claims in a similar composition and further, Gaul teaches the use of surfactants and fragrances in general.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaul (US 5,413,729) as applied to claims 1-4, 6, 7, 11-19, 21-26, 33-42, 108, 110, 112-116, 120, 121, 122, 124, 125, and 129-134 above, and further in view of Carbonell et al (US 2003/0213747).

Gaul is relied upon as set forth above. However, Gaul does not teach the use of an isopropyl benzoic acid ester in addition to the other requisite components of the composition as recited by the instant claims.

Carbonell et al are relied upon as set forth above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use isopropyl benzoic acid ester (i.e. isopropyl benzoate) in the composition taught by Gaul, with a reasonable expectation of success, because Carbonell et al teach the use of isopropyl benzoic acid ester as an environmentally friendly solvent in a similar composition and further, Gaul teaches the use of any aromatic ester solvent, and preferably benzoic acid esters.

Claims 106, 107, and 111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaul (US 5,413,729) in view of Heimann (US 6,281,189), Nieendick et al (US 5,421,907), or Folkard et al (US 5,194,173) as applied to the rejected claims above, and further in view of Carbonell et al (US 2003/0213747); and Smith et al (US 6,544,942) or Zeilinger (US 6,838,426).

Gaul is relied upon as set forth above. However, Gaul does not teach the use of isopropyl benzoic acid ester and diethylene glycol monobutyl ether in addition to the other requisite components of the composition as recited by the instant claims.

Carbonell et al are relied upon as set forth above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use isopropyl benzoic acid ester (i.e. isopropyl benzoate) in the composition taught by Gaul, with a reasonable expectation of success, because Carbonell et al teach the use of isopropyl benzoic acid ester as an environmentally friendly solvent in a similar composition and further, Gaul teaches the use of any aromatic ester solvent, and preferably benzoic acid esters.

Smith et al teach a pseudo-stable phase splitting solvent composition that forms a single liquid phase when subjected to mild agitation. The composition can be used to clean, reduce the microbial population or, or degrease soiled surfaces, or to strip floor finishes or other coatings from coated surfaces. See Abstract and column 1, lines 5-15. The compositions may also contain sufficient solvent in amounts at least about 5% by weight. Suitable solvents include diethylene glycol monobutyl ether, dipropylene glycol monobutyl ether, etc. See column 5, line 55 to column 6, line 45.

Zeilinger teaches a sprayable gel cleaning composition. The gel can be used to clean concrete and brick and also remove caulk and paint from surfaces. See Abstract. The gel preferably comprises a polar solvent in amounts from about 5% to 50% by weight. Suitable polar solvents include diethylene glycol monobutyl ether, dipropylene glycol monobutyl ether, etc. See column 4, lines 1-45.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use diethylene glycol monobutyl ether in the composition taught by Gaul, with a reasonable expectation of success, because Zeilinger and Smith et al teach the use of diethylene glycol monobutyl ether as a solvent in a similar composition and further, Gaul teaches the use of solvents in general.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).



Claims 1-19, 21-28, 33-43, 105-122, 124-126, and 129-135 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 7,547,672 in view of Carbonell et al (US 2003/0213747). Claims 1-12 of US 7,547,672 encompass all the material limitations of the instant claims except for the inclusion of an aromatic ester.

Carbonell et al are relied upon as set forth above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a benzoic acid ester solvent in the cleaning composition claimed by '672, with a reasonable expectation of success, because Carbonell et al teach the use of solvents such as benzoic acid esters in similar cleaning compositions and that benzoic acid esters are environmentally friendly solvents and further, '672 claims the use of various cosolvents and diluents which would encompass benzoic acid ester solvents.

This is a provisional obviousness-type double patenting rejection.

### ***Response to Arguments***

With respect to the rejection of the instant claims under 35 USC 103 using Heimann in view of Carbonell, Applicant once again states that this combination does not support a prima facie case of obviousness since the Patent Office provides no convincing line of argument that one of ordinary skill in the art would have been motivated to add a benzoic acid ester to the Heimann composition. Furthermore, Applicant states that even if one of ordinary skill in the art were to use such a benzoic acid ester in the composition taught by Heimann, Carbonell teaches at least 70% by

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weight of the benzoic acid ester which is outside the range of 10% to 60% by weight as recited by the instant claims. Additionally, Applicant states that the instant specification defines a cosolvent as any substance which upon addition to a composition increases the solubility of the composition in a particular substance, such as water, and as such, one of ordinary skill in the art would understand that Heimann employs the term "co-solvent" in the same way that it is employed in the instant application. Thus, Applicant submits that the Patent Office's assertion that the benzoic acid ester of Carbonell would be a "co-solvent" within the meaning of Heimann is believed to be incorrect since Applicant contends that a benzoic acid ester would not increase the solubility of methyl soyate and d-limonene in water and therefore, would not function as a cosolvent in the compositions as taught by Heimann.

At the outset, the Examiner maintains that it is well known to those skilled in the art that solvents used for removing paint, ink, graffiti, coatings, residues, etc., are interchangeable and those possessing environmentally friendly benefits are especially desirable. While Applicant states that the Examiner's statement is an example of the Patent Office taking official notice without the required evidentiary support, the Examiner asserts that the Examiner has merely stated a well-known fact with respect to various solvents which supports the prima facie case of obviousness as set forth above. The Examiner maintains, as stated previously, that both Heimann and Carbonell et al are combinable as prior art since they are both drawn to the same field of endeavor, namely residue removal compositions. Carbonell et al is analogous prior art relative to Heimann and one of ordinary skill in the art clearly would look to the teachings of

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Carbonell to cure the deficiencies of Heimann et al. Additionally, the Examiner maintains, as stated previously, that Carbonell et al is a secondary reference relied upon for its teaching of benzoic acid ester as a solvent in a similar residue removal composition. The Examiner maintains that one of ordinary skill in the art would clearly have been motivated to use a benzoic acid ester solvent in the composition taught by Heimann, with a reasonable expectation of success, because Carbonell et al teach the use of solvents such as benzoic acid esters in similar cleaning compositions and that benzoic acid esters are environmentally friendly solvents and further, Heimann et al teach the use of various cosolvents which would encompass benzoic acid ester solvents.

While Carbonell et al do teach that the compositions contain at least 70% by weight of the benzoic acid ester solvent, Heimann, which is the primary reference, teaches that cosolvents are used in the compositions in amounts from 1 to 30% by weight. The Examiner maintains, as stated previously, that one of ordinary skill in the art would be motivated to use the benzoic acid ester taught by Carbonell et al in the compositions of Heimann in amounts from 1 to 30% by weight which are the suitable amounts for cosolvent materials in the compositions taught by Heimann and not in the amounts used by the secondary reference. Said differently, Carbonell et al are relied upon for its teaching that benzoic acid esters are environmentally friendly solvents used in residue removing compositions and not for the amounts in which it is used in such compositions. Note that, the Examiner asserts that the cosolvents taught by Heimann are open to a wide variety of cosolvents and selection of a particular cosolvent is not

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critical to the composition taught by Heimann. Thus, the Examiner maintains that the teachings of Heimann in combination with Carbonell et al are sufficient to render the claimed invention obvious under 35 USC 103. Further, the Examiner maintains that the definition of "cosolvent" as described in the instant specification is not necessarily applicable to the teachings of Heimann nor is the "cosolvent" as taught by Heimann limited to the definition given in the instant specification, and that the cosolvent as described in Heimann will be given its broadest reasonable interpretation which would be an additional solvent enhancing the cleaning ability of the first solvent. As stated above, Carbonell et al teach that benzoic acid ester solvents are environmentally friendly solvents used to dissolve or remove residues and/or substances from substrates which is the same field of endeavor and drawn to solving the same problem addressed by Heimann et al, namely cleaning and residue removal. Clearly, use of benzoic acid ester solvents in the composition taught by Heimann et al would enhance the cleaning ability of the composition and thus, would function as satisfactory cosolvent. Thus, the Examiner maintains that one of ordinary skill in the art would clearly be motivated to use the benzoic acid ester solvents as taught by Carbonell et al in the cleaning compositions taught by Heimann et al. Additionally, while Applicant states that Heimann suggests that a co-solvent is a co-solvent for the soybean oil derived compound and/or the drying agent and therefore, co-solvent has the same meaning as disclosed in the instant specification, the Examiner asserts that this disclosure of a co-solvent for the soybean oil derived compound taught by Heimann

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may be interpreted as an additional or extra solvent used in the composition thereby enhancing the cleaning ability of the composition.

Also, Applicant states that Heimann teaches from 1% to about 30% by weight of a cosolvent while claim 105 recites that the composition comprises from about 40% to about 60% by weight of an aromatic ester. In response, note that, the Examiner asserts that "about 30%" by weight of a cosolvent would fall within the scope of "**about** 40%" of an aromatic ester as recited by the instant claims. Alternatively, even if "about 30%" by weight as taught by Heimann does not fall within the scope of "about 40%" by weight as recited by the instant claims, which the Examiner clearly is not conceding, the Examiner maintains that one of ordinary skill in the art would have a reasonable expectation of success to formulate the composition of Heimann using cosolvent in amounts of "about 40%" by weight from a teaching of "about 30%" by weight by Heimann due to an expectation of similar properties at "about 30%" and "about 40%" by weight of cosolvent. Note that, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.05.

Further, while Applicant states that the Examiner has employed impermissible hindsight reasoning in combining Heimann with Carbonell et al, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which

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was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

With respect to the rejection of the instant claims under 35 USC 103 using Krawack in view of Carbonell, Applicant once again states that the Patent Office has employed impermissible hindsight in combining Krawack and Carbonell since one of ordinary skill in the art would not look to a reference that teaches compositions for removing petroleum residues from a substrate to add to a composition designed to remove fats and/or inks from printing equipment. Additionally, Applicant states that the Patent office has misinterpreted the holdings of In re Kerkhoven. At the outset, as stated above, the Examiner maintains, as stated previously, that it is well known to those skilled in the art that solvents used for removing paint, ink, graffiti, coatings, residues, etc., are interchangeable and those possessing environmentally friendly benefits are especially desirable. The Examiner maintains, as stated previously, that both Krawack and Carbonell et al are combinable as prior art since they are both drawn to the same field of endeavor, namely solvent-based residue removal compositions. Additionally, the Examiner maintains that Carbonell et al is a secondary reference relied upon for it teaching of benzoic acid ester as a solvent in a similar residue removal composition. The Examiner maintains that one of ordinary skill in the art would clearly have been motivated to use a benzoic acid ester solvent in the composition taught by Krawack, with a reasonable expectation of success, because Carbonell et al teach the

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use of solvents such as benzoic acid esters in similar cleaning compositions and that benzoic acid esters are environmentally friendly solvents. Additionally, the Examiner maintains that the principle laid out in In re Kerkhoven has been properly applied by the Examiner. In short, both methyl soyate and benzoic acid ester are taught to be suitable as solvents used in residue removal compositions and where the prior art teaches two compositions useful for the same purpose (i.e., solvents for removing residue), it is obvious to combine these components to form a third composition for very same purpose. Furthermore, Carbonell et al teach that benzoic acid esters are environmentally friendly which makes the combination of solvents even more desirable.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Thus, the Examiner maintains that the teachings of Krawack in combination with Carbonell et al are sufficient to render the claimed invention obvious under 35 USC 103.

With respect to the rejection of claims 20 and 29-32 under 35 USC 103 using Krawack in combination with Carbonell et al, and further in view of Heimann et al, Applicant states that Krawack in combination Carbonell et al is not sufficient to reject instant claim 1 and thus, Carbonell et al do not remedy the deficiencies of Krawack and

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Carbonell et al with respect to instant claim 1. In response, note that, the Examiner maintains that the teachings of Krawak in view of Carbonell et al are sufficient to suggest the claimed invention for the reasons set forth above. Heimann et al is a secondary reference relied upon for its teaching of d-limonene. The Examiner maintains that one of ordinary skill in the art clearly would have been motivated to use d-limonene as a fragrance in the composition taught by Krawack, with a reasonable expectation of success, because Heimann et al teach use of d-limonene as an odorant in a similar cleaning composition and further, odorants such as d-limonene are notoriously well-known to those skilled in the art as suitable for use in cleaning compositions and desirable for such use.

Additionally, Applicant states that even if the Patent Office has established a prima facie case of obviousness, a Declaration submitted under 37 CFR 1.132 and filed on 12/23/08 shows the unexpected and superior properties of the claimed invention in comparison to compositions falling outside the scope of the instant claims. Specifically, Applicant states that the presently claimed compositions are vastly superior to compositions consisting of an aliphatic ester alone (e.g., methyl soyate) at dissolving asphalt. In response, note that, the Examiner asserts that the 132 Declaration is not sufficient to place the instant claims in condition for allowance. The data presented in the 132 Declaration is not commensurate in scope with the instant claims. For example, instant claims 1, 105, 108, 110, and 112 recite broad amounts of various aromatic esters and broad amounts of various aliphatic esters while the Declaration provides data with respect to one specific embodiment containing 54% of isopropyl benzoic acid



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ester and 40% biodiesel which is not commensurate in scope with the instant claims. Additionally, with respect to instant claims 106 and 107, note that, "biodiesel" does not appear to be one specific compound but is a generic class of compounds as defined on pages 15 and 16 of the instant specification; the 132 Declaration does not specify what "biodiesel compound is being used in the experimental data and the instant claims do not specify what biodiesel compounds are being claimed. Therefore, it is unclear if the biodiesel used in the 132 Declaration corresponds to the biodiesel being claimed such that an objective determination of superior and unexpected results with respect to the claimed invention cannot be made. Furthermore, note that, instant claims 106 and 107 require, at a minimum, isopropyl benzoic acid ester, "biodiesel" and 10% diethylene glycol monobutyl ether, while the data provides results with respect to only isopropyl benzoic acid ester and "biodiesel" such that the data is not representative of the composition as recited by instant claims 106 and 107. Thus, the Examiner asserts that the Declaration is not sufficient to show the unexpected and superior properties of the claimed invention in comparison to compositions falling outside the scope of the instant claims.

With respect to the double patenting rejection US 7,547,672 in view of Carbonell et al, Applicant states that this rejection, similar to the prior art rejections set forth above, is based on impermissible hindsight reasoning. Further, Applicant states that there is no disclosure in '672 to formulate an aromatic ester in the amount of from 40% to 60% by weight as recited by instant claim 105 or from 30% to 50% as recited by instant claim 108. Additionally, Applicant states that this is no motivation for the

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inclusion of 30% to 60% of a fatty acid methyl ester as recited by instant claim 105 or 40 to 50% of an aliphatic ester as recited by instant claim 108. In response, note that, the Examiner asserts that about 20% by weight of a methyl ester such as methyl soyate as suggested by claims 1 and 2 of '672 would fall within the scope of "about" 30% as recited by instant claim 105. Additionally, claim 1 of '672 recites from about 10 to about 99.5 weight percent of an aliphatic ester which would suggest 40% to 50% by weight of an aliphatic ester as recited by instant claim 108. With respect to the aromatic ester component such as isopropyl benzoate, the Examiner asserts that it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a benzoic acid ester solvent in the cleaning composition claimed by '672, with a reasonable expectation of success, because Carbonell et al teach the use of solvents such as benzoic acid esters in similar cleaning compositions and that benzoic acid esters are environmentally friendly solvents and further, '672 claims the use of various cosolvents and diluents which would encompass benzoic acid ester solvents. Note that, '672 claims the use of 0 to about 50% by weight of diluent.

In response to applicant's argument that the examiner's conclusion of obviousness-type double patenting is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170

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USPQ 209 (CCPA 1971). Thus, the Examiner asserts that claims 1-12 of US 7,547,672 in view of Carbonell et al are sufficient to suggest the claimed invention.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Gregory R. Del Cotto/  
Primary Examiner, Art Unit 1796

/G. R. D./  
July 23, 2010